

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 10/561,304A  
Source: IFWP  
Date Processed by STIC: 3/29/07

# ***ENTERED***



IFWP

## RAW SEQUENCE LISTING

DATE: 03/29/2007

PATENT APPLICATION: US/10/561,304A

TIME: 10:27:34

Input Set : A:\87521.APP

Output Set: N:\CRF4\03282007\J561304A.raw

```

3 <110> APPLICANT: Del Borgo, Mark
4     Wade, John D.
5     Bathgate, Ross D.
6     Hughes, Richard A.
7     Howard Florey Institute of Physiology and Medicine
8     The University of Melbourne
10 <120> TITLE OF INVENTION: Relaxin Superfamily Peptide Analogues
12 <130> FILE REFERENCE: 087521-000000US
14 <140> CURRENT APPLICATION NUMBER: US 10/561,304A
C--> 15 <141> CURRENT FILING DATE: 2006-06-19
17 <150> PRIOR APPLICATION NUMBER: AU 2003903124
18 <151> PRIOR FILING DATE: 2003-06-20
20 <150> PRIOR APPLICATION NUMBER: WO PCT/AU04/00798
21 <151> PRIOR FILING DATE: 2004-06-18
23 <160> NUMBER OF SEQ ID NOS: 25
25 <170> SOFTWARE: PatentIn Ver. 2.1
27 <210> SEQ ID NO: 1
28 <211> LENGTH: 28
29 <212> TYPE: PRT
30 <213> ORGANISM: Homo sapiens
32 <220> FEATURE:
33 <223> OTHER INFORMATION: relaxin-1 b-chain
35 <400> SEQUENCE: 1
36 Lys Trp Lys Asp Asp Val Ile Lys Leu Cys Gly Arg Glu Leu Val Arg
37   1             5             10             15
39 Ala Gln Ile Ala Ile Cys Gly Met Ser Thr Trp Ser
40             20             25
43 <210> SEQ ID NO: 2
44 <211> LENGTH: 29
45 <212> TYPE: PRT
46 <213> ORGANISM: Homo sapiens
48 <220> FEATURE:
49 <223> OTHER INFORMATION: relaxin-2 b-chain
51 <400> SEQUENCE: 2
52 Asp Ser Trp Met Glu Glu Val Ile Lys Leu Cys Gly Arg Glu Leu Val
53   1             5             10             15
55 Arg Ala Gln Ile Ala Ile Cys Gly Met Ser Thr Trp Ser
56             20             25
59 <210> SEQ ID NO: 3
60 <211> LENGTH: 27
61 <212> TYPE: PRT
62 <213> ORGANISM: Homo sapiens
64 <220> FEATURE:

```

## RAW SEQUENCE LISTING

DATE: 03/29/2007

PATENT APPLICATION: US/10/561,304A

TIME: 10:27:34

Input Set : A:\87521.APP

Output Set: N:\CRF4\03282007\J561304A.raw

65 &lt;223&gt; OTHER INFORMATION: relaxin-3 b-chain

67 &lt;400&gt; SEQUENCE: 3

68 Arg Ala Ala Pro Tyr Gly Val Arg Leu Cys Gly Arg Glu Phe Ile Arg

69 1 5 10 15

71 Ala Val Ile Phe Thr Cys Gly Gly Ser Arg Trp

72 20 25

75 &lt;210&gt; SEQ ID NO: 4

76 &lt;211&gt; LENGTH: 30

77 &lt;212&gt; TYPE: PRT

78 &lt;213&gt; ORGANISM: Homo sapiens

80 &lt;220&gt; FEATURE:

81 &lt;223&gt; OTHER INFORMATION: insulin b-chain

83 &lt;400&gt; SEQUENCE: 4

84 Phe Val Asn Gln His Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr

85 1 5 10 15

87 Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr

88 20 25 30

91 &lt;210&gt; SEQ ID NO: 5

92 &lt;211&gt; LENGTH: 29

93 &lt;212&gt; TYPE: PRT

94 &lt;213&gt; ORGANISM: Homo sapiens

96 &lt;220&gt; FEATURE:

97 &lt;223&gt; OTHER INFORMATION: insulin-like growth factor 1 (IGF-1) b-chain

99 &lt;400&gt; SEQUENCE: 5

100 Gly Pro Glu Thr Leu Cys Gly Ala Glu Leu Val Asp Ala Leu Gln Phe

101 1 5 10 15

103 Val Cys Gly Asp Arg Gly Phe Tyr Phe Asn Lys Pro Thr

104 20 25

107 &lt;210&gt; SEQ ID NO: 6

108 &lt;211&gt; LENGTH: 31

109 &lt;212&gt; TYPE: PRT

110 &lt;213&gt; ORGANISM: Homo sapiens

112 &lt;220&gt; FEATURE:

113 &lt;223&gt; OTHER INFORMATION: insulin-like growth factor 2 (IGF-2) b-chain

115 &lt;400&gt; SEQUENCE: 6

116 Tyr Arg Pro Ser Glu Thr Leu Cys Gly Gly Glu Leu Val Asp Thr Leu

117 1 5 10 15

119 Gln Phe Val Cys Gly Asp Arg Gly Phe Tyr Phe Ser Arg Pro Ala

120 20 25 30

123 &lt;210&gt; SEQ ID NO: 7

124 &lt;211&gt; LENGTH: 31

125 &lt;212&gt; TYPE: PRT

126 &lt;213&gt; ORGANISM: Homo sapiens

128 &lt;220&gt; FEATURE:

129 &lt;223&gt; OTHER INFORMATION: insulin-like 3 (INSL3) b-chain

131 &lt;400&gt; SEQUENCE: 7

132 Pro Thr Pro Glu Met Arg Glu Lys Leu Cys Gly His His Phe Val Arg

133 1 5 10 15

135 Ala Leu Val Arg Val Cys Gly Gly Pro Arg Trp Ser Thr Glu Ala

## RAW SEQUENCE LISTING

DATE: 03/29/2007

PATENT APPLICATION: US/10/561,304A

TIME: 10:27:34

Input Set : A:\87521.APP

Output Set: N:\CRF4\03282007\J561304A.raw

```

136          20          25          30
139 <210> SEQ ID NO: 8
140 <211> LENGTH: 33
141 <212> TYPE: PRT
142 <213> ORGANISM: Homo sapiens
144 <220> FEATURE:
145 <223> OTHER INFORMATION: insulin-like 4 (INSL4) b-chain
147 <400> SEQUENCE: 8
148 Glu Ser Leu Ala Ala Glu Leu Arg Gly Cys Gly Pro Arg Phe Gly Lys
149   1          5          10          15
151 His Leu Leu Ser Tyr Cys Pro Met Pro Glu Lys Thr Phe Thr Thr Thr
152   20          25          30
154 Pro
157 <210> SEQ ID NO: 9
158 <211> LENGTH: 33
159 <212> TYPE: PRT
160 <213> ORGANISM: Homo sapiens
162 <220> FEATURE:
163 <223> OTHER INFORMATION: insulin-like 5 (INSL5) b-chain
165 <400> SEQUENCE: 9
166 Val Arg Ser Lys Glu Ser Val Arg Leu Cys Gly Leu Glu Tyr Ile Arg
167   1          5          10          15
169 Thr Val Ile Tyr Ile Cys Ala Ser Ser Arg Trp Arg Arg His Leu Glu
170   20          25          30
172 Gly
175 <210> SEQ ID NO: 10
176 <211> LENGTH: 33
177 <212> TYPE: PRT
178 <213> ORGANISM: Homo sapiens
180 <220> FEATURE:
181 <223> OTHER INFORMATION: insulin-like 6 (INSL6) b-chain
183 <400> SEQUENCE: 10
184 Ser Asp Ile Ser Ser Ala Arg Lys Leu Cys Gly Arg Tyr Leu Val Lys
185   1          5          10          15
187 Glu Ile Glu Lys Leu Cys Gly His Ala Asn Trp Ser Gln Phe Arg Phe
188   20          25          30
190 Glu
193 <210> SEQ ID NO: 11
194 <211> LENGTH: 25
195 <212> TYPE: PRT
196 <213> ORGANISM: Artificial Sequence
198 <220> FEATURE:
199 <223> OTHER INFORMATION: Description of Artificial Sequence:cyclic relaxin
200   b-chain mimetic (cRlx)
202 <220> FEATURE:
203 <221> NAME/KEY: DISULFID
204 <222> LOCATION: (2)..(24)
206 <400> SEQUENCE: 11
207 Ser Cys Met Glu Glu Val Ile Lys Leu Ser Gly Arg Glu Leu Val Arg

```

## RAW SEQUENCE LISTING

DATE: 03/29/2007

PATENT APPLICATION: US/10/561,304A

TIME: 10:27:34

Input Set : A:\87521.APP

Output Set: N:\CRF4\03282007\J561304A.raw

```

208      1              5              10              15
210 Ala Gln Ile Ala Ile Ser Gly Cys Ser
211              20              25
214 <210> SEQ ID NO: 12
215 <211> LENGTH: 27
216 <212> TYPE: PRT
217 <213> ORGANISM: Artificial Sequence
219 <220> FEATURE:
220 <223> OTHER INFORMATION: Description of Artificial Sequence:insulin-like 3
221      (INSL3) b-chain peptide analogue 4, cyclic peptide
222      cINSL3a
224 <220> FEATURE:
225 <221> NAME/KEY: DISULFID
226 <222> LOCATION: (3)..(25)
228 <400> SEQUENCE: 12
229 Thr Pro Cys Met Arg Glu Lys Leu Ser Gly His His Phe Val Arg Ala
230      1              5              10              15
232 Leu Val Arg Val Ser Gly Gly Pro Cys Trp Ser
233              20              25
236 <210> SEQ ID NO: 13
237 <211> LENGTH: 27
238 <212> TYPE: PRT
239 <213> ORGANISM: Artificial Sequence
241 <220> FEATURE:
242 <223> OTHER INFORMATION: Description of Artificial Sequence:insulin-like 3
243      (INSL3) b-chain peptide analogue 5, cyclic peptide
244      cINSL3b
246 <220> FEATURE:
247 <221> NAME/KEY: DISULFID
248 <222> LOCATION: (3)..(25)
250 <400> SEQUENCE: 13
251 Thr Pro Cys Met Arg Glu Lys Leu Ser Gly Arg His Phe Val Arg Ala
252      1              5              10              15
254 Leu Val Arg Val Ser Gly Gly Pro Cys Trp Ser
255              20              25
258 <210> SEQ ID NO: 14
259 <211> LENGTH: 27
260 <212> TYPE: PRT
261 <213> ORGANISM: Artificial Sequence
263 <220> FEATURE:
264 <223> OTHER INFORMATION: Description of Artificial Sequence:insulin-like 3
265      (INSL3) b-chain peptide analogue 6
267 <400> SEQUENCE: 14
268 Thr Pro Cys Met Arg Glu Lys Leu Ser Gly Arg Glu Leu Val Arg Ala
269      1              5              10              15
271 Gln Val Ile Ala Ile Gly Gly Pro Cys Trp Ser
272              20              25
275 <210> SEQ ID NO: 15
276 <211> LENGTH: 27

```

## RAW SEQUENCE LISTING

DATE: 03/29/2007

PATENT APPLICATION: US/10/561,304A

TIME: 10:27:34

Input Set : A:\87521.APP

Output Set: N:\CRF4\03282007\J561304A.raw

```

277 <212> TYPE: PRT
278 <213> ORGANISM: Artificial Sequence
280 <220> FEATURE:
281 <223> OTHER INFORMATION: Description of Artificial Sequence:insulin-like 3
282      (INSL3) b-chain peptide analogue 7
284 <400> SEQUENCE: 15
285 Thr Cys Glu Met Arg Glu Lys Leu Ser Gly His His Phe Val Arg Ala
286   1           5           10           15
288 Leu Val Arg Val Ser Gly Gly Cys Arg Trp Ser
289           20           25
292 <210> SEQ ID NO: 16
293 <211> LENGTH: 24
294 <212> TYPE: PRT
295 <213> ORGANISM: Homo sapiens
297 <220> FEATURE:
298 <223> OTHER INFORMATION: relaxin-1 a-chain
300 <400> SEQUENCE: 16
301 Arg Pro Tyr Val Ala Leu Phe Glu Lys Cys Cys Leu Ile Gly Cys Thr
302   1           5           10           15
304 Lys Arg Ser Leu Ala Lys Tyr Cys
305           20
308 <210> SEQ ID NO: 17
309 <211> LENGTH: 24
310 <212> TYPE: PRT
311 <213> ORGANISM: Homo sapiens
313 <220> FEATURE:
314 <223> OTHER INFORMATION: relaxin-2 a-chain
316 <400> SEQUENCE: 17
317 Gln Leu Tyr Ser Ala Leu Ala Asn Lys Cys Cys His Val Gly Cys Thr
318   1           5           10           15
320 Lys Arg Ser Leu Ala Arg Phe Cys
321           20
324 <210> SEQ ID NO: 18
325 <211> LENGTH: 24
326 <212> TYPE: PRT
327 <213> ORGANISM: Homo sapiens
329 <220> FEATURE:
330 <223> OTHER INFORMATION: relaxin-3 a-chain
332 <400> SEQUENCE: 18
333 Asp Val Leu Ala Gly Leu Ser Ser Ser Cys Cys Lys Trp Gly Cys Ser
334   1           5           10           15
336 Lys Ser Glu Ile Ser Ser Leu Cys
337           20
340 <210> SEQ ID NO: 19
341 <211> LENGTH: 26
342 <212> TYPE: PRT
343 <213> ORGANISM: Homo sapiens
345 <220> FEATURE:
346 <223> OTHER INFORMATION: insulin a-chain

```

**VERIFICATION SUMMARY**

DATE: 03/29/2007

PATENT APPLICATION: US/10/561,304A

TIME: 10:27:35

Input Set : A:\87521.APP

Output Set: N:\CRF4\03282007\J561304A.raw

L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date